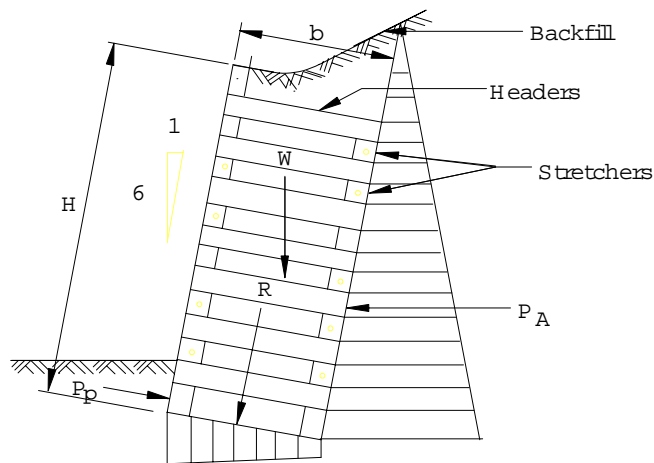


SECTION 31

CRIB WALLS

1.31.1 DESIGN AND DETAILS

- a. Reinforced concrete crib walls may be considered for use where yielding foundation material is indicated and it is not scheduled to be removed under roadway items of work and where aesthetics is not a factor.
- b. Design criteria for gravity walls apply. The wall section resisting overturning is taken as a rectangle of dimensions (H x b). The mass of the crib is equal to that of material within (H x b) including the mass of crib members.



TYPICAL SECTION

- c. Low walls (1.2 meters high and under) may be detailed with a plumb face. Higher walls are battered on the face at least 6:1. For high walls (3.7 meters high and over) the batter is increased or supplemental cribs are added at the back.
- d. Closed face crib walls shall be used in all cases. Expansion joints shall be spaced no more than 27 meters apart. Double headers shall be used at expansion joints and at changes in alignment.
- e. The wall should not be laid up higher than 900 millimeters above the level of the fill within the crib.
- f. No special requirements for drainage and frost action are required. The wall should be free draining.
- g. For design of structural elements against applied pressures, refer to SEELYE's Foundations Design and Practice publication.

- h. Where foundations conditions are especially adverse, a special sill unit to spread the load or cast-in-place concrete spread footing is recommended.
- i. Pay items for concrete crib wall shall be as specified in the 1996 NJ Standard Specifications for Road and Bridge Construction (Section 516).
- j. Rebars shall be used for reinforcement. Wire mesh will not be permitted.
- k. Contract plans shall include a plan, elevation, sections, and fully dimensioned details of headers and stretchers.
- l. The 1996 NJ Standard Specifications for Road and Bridge Constructions permit the Contractor to propose use of crib members with dimensions different than those shown on a set of plans. These units are commonly referred to as "King Size". Header spacing is 2.4 meters instead of 1.8 meters and dimensions of the members are slightly larger. Shop plans shall be checked accordingly.